

Excellent experimental facilities exist for the synthesis, molecular, morphological characterization and the testing of polymers. The following equipment is available in the LPRE:

- Fourier transform infrared spectrophotometer (FTIR, Perkin Elmer 2000)
- UV-Vis spectrophotometer (UV-Vis, Shimadzu UV-2100)
- GC-head space chromatograph (Hewlett Packard 6890- Hewlett Packard 7694)
- Differential scanning calorimeter (DSC, Perkin Elmer DSC-7)
- Thermogravimetric analyzer (TGA, Perkin Elmer TGA-7)
- Dynamic mechanical analyzer (DMA, Perkin Elmer TAC 7/DX)
- Dynamic light scattering (Malvern, Autosizer Lo-C)
- Laser diffraction particle size analyzer (Malvern, Model 2605c)
- High temperature gel permeation chromatograph with multiple detectors (PL-GPC210, PolymerLabs)
- Gel permeation chromatograph (Varian Series)
- Apparatus for measurement of polymer rheological properties
- High-precision sorption microbalance
- Scanning Probe Microscope (Digital Instruments, Nanoscope IIIa)
- Optical microscope - Image analysis system (Leitz Mettalex, Image ProPlus)
- Stereomicroscope (NIKON, Model SMZ-2T)
- Apparatus for intrinsic viscosity measurements
- Apparatus for interfacial tension measurements (Kruss, Typ K10T)
- High-precision apparatus for density measurements
- Four fully automated, high-pressure stirred autoclaves for polymer production
- Several mechanical dispersion units (Homogenizers/KINEMATICA AG, Sonicator/Sonics & Materials)
- Twin-screw BRABENDER extruder (DSE ϕ 25) and mixer (PL 2100-6)
- Fluidized bed particle coating device (UniGlatt)
- Extrusion device for the synthesis of liposomes (LiposoFast-Pneumatic, Avestin Inc.)
- Tangential flow filtration device (Milsch)
- Spray dryer (Mini Spray Dryer, Buchi B-191)